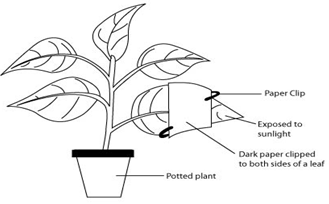
|  |  |  |
| --- | --- | --- |
|  | **Biology** | **شعار-القسم** |
| **Worksheet-3-** |
| Photosynthesis |

|  |  |
| --- | --- |
| Name: Class: 8 /……........ | |
| Book pages:332-335 | |
| **5-3-2012** | Date: |
| 8.10.3-8.10.4 | Core Standard number |
| 1. Remind students that plants need light as well as carbon dioxide and water in order to grow well  2.To show that light is necessary for photosynthesis**.**  3. To show that chlorophyll is necessary for photosynthesis.  4. Construct the chemical equation for photosynthesis in words and symbols. | Learning Objectives  Logo + text 2 |

1. Set up the following apparatus:

A paper is Fixed the on one of the leaves( destarched leaves ) as shown in the diagram below

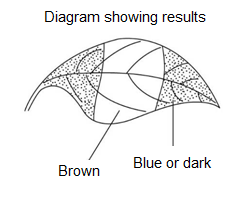


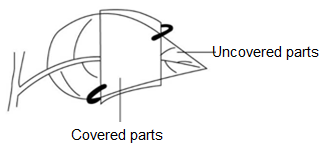
The experimental set up is exposed to sunlight for 2-6 hours. The paper is removed and the leaf is tested for starch.

Results.

The diagrams below shows the leaf before the experiment and after.

A test for starch is conducted on both the covered parts of the leaf and uncovered parts of the leaf.

The Diagram shows results: the parts that were covered are stained brown, and the rest of the leaf turns blue or black)



Use the result above to answer the following questions:

1. How does the leaf appear after the test for starch?

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………

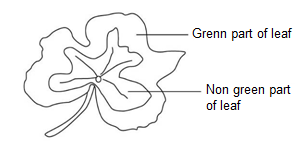
1. In which part of the leaf starch is produced? Justify your answer.

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………

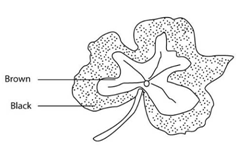
…………………………………………………………………………………………………………………

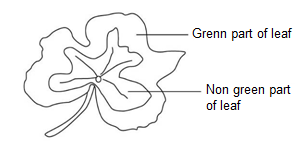
1. Is light necessary for photosynthesis? Justify our answer.

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. The following picture shows a variegated plant:

The plant with variegated leaves is left in light for 2-6 hours. One leaf is removed and tested for starch.

The following pictures show a variegated leaf before and after testing for starch with iodine solution.



After the test for starch

Before the test for starch

Use the iformation above to answer the following questions:

1. Which part of the variegated leaf contains chlorophyll.

…………………………………………………………………………………………………………………

1. Where is the starch made?

………………………………………………………………………………………………………………..

………………………………………………………………………………………………………………..

1. Is chlorophyll necessary for photosynthesis? Justify your answer.

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………